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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,911	01/05/2004	Tomohiko Koto	108075-00121	1994
4372	7590	07/26/2005	EXAMINER	
ARENT FOX PLLC 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			NGUYEN, LONG T	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/750,911	KOTO, TOMOHIKO	
	Examiner Long Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 5/25/05 + 6/13/05.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 5 and 6 is/are rejected.
- 7) Claim(s) 1-4 and 7-28 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 June 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is responsive to the amendments filed on 5/25/05 and 6/13/05.

### ***Claim Objections***

2. Claims 1-28 are objected to because of the following informalities:

In claim 1, line 3, “than the” should be changed to --than absolute value of the--.

In claim 1, line 13, after “state; and”, it is suggested to insert --wherein the level shift circuit further includes-- (i.e., the level shifter also includes a level shift circuit. For example, the combination of transistors 26 and 27 in Figure 9 forms a level shifter circuit (note the transistor 27 is the first circuit in the claim), see lines 11-13 on page 16 of the instant specification).

In claim 1, line 16, “to voltage” should be changed to --to the absolute value of the--.

Claims 2-7 are objected to because they include the informality of claim 1.

In claim 4, line 2, “the voltage at the output terminal” should be changed to --a voltage at an output terminal-- to avoid lacks antecedent basis.

In claim 8, line 3, after “less than”, --absolute value of-- should be inserted.

In claim 8, line 5, “than the” should be changed to --than absolute value of the--.

In claim 8, line 20, after “and”, it is suggested to insert --wherein the level shift circuit further includes-- (i.e., the level shifter also includes a level shift circuit. For example, the combination of transistors 26 and 27 in Figure 9 forms a level shifter circuit (note the transistor 27 is the first circuit in the claim), see lines 11-13 on page 16 of the instant specification).

Claims 9-28 are objected to because they include the informalities of claim 8.

In claim 13, lines 3 and 4, “the withstand” should be changed to --the withstand--.

Claim 26, line 4, "transistor including" should be changed to --transistor of the third current control circuit including-- to avoid unclear antecedent basis problem.

Appropriate correction is required

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the recitation "wherein the second circuit includes a constantly activated transistor" is misdescriptive since it is inconsistent with what is disclosed and shown. Note that Figure 14 clearly shows the second circuit (transistors 62a-62b) is controlled by current control signal S1, so the second circuit is turned on/off depending on the control signal S1 which is switched between the standby state and the activated state. Clarification and/or appropriate correction is requested.

With respect to claim 6, the recitation "wherein the second circuit includes a transistor having a gate connected to the first power supply" is misdescriptive". Note that Figure 14 shows the second circuit (transistors 62a-62b) is controlled by the signal S1 (not by the first power supply). Clarification and/or appropriate correction is requested.

***Allowable Subject Matter***

5. Claims 1-4 and 7-28 would be allowable if rewritten or amended to overcome the informalities set forth in this Office action.

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6. Claims 5 and 6 depend on allowable claim 1, so claims 5 and 6 would be allowed if amended to overcome the indefiniteness set forth above.

*Response to Arguments*

7. Applicant's arguments filed 5/25/05 have been fully considered but they are not persuasive.

With respect to the objection of claim 1, applicant argues that such suggestion to insert “wherein the level shift circuit further includes” after “and” on line 18 of original claim 1 (filed 1/5/04) to read as ‘a current control circuit connected between the first power supply and wherein the level shift circuit further includes the’ would misstate the invention. In response, it appears that applicant counts the line of the claim incorrectly. Note that, a first line of the claim is count as line 1 and so on, so line 18 of original claim 1 is the line reciting “activated state and a standby state; and”. Thus, after “state; and” on line 13 of claim 1 (in amendment filed 5/25/05), --wherein the level shift circuit further includes-- should be inserted to avoid a misdescriptive problem (i.e., the level shifter also includes a level shift circuit. For example, the combination of transistors 26 and 27 in Figure 9 forms a level shifter circuit (note the transistor 27 is the first circuit in the claim), see lines 11-13 on page 16 of the instant specification).

Claim 8 has similar problem as claim 1 but applicant did not address the problem.

With respect to the rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, of claims 5 and 6, applicant argues that the second circuit of claims 5 and 6 refers to shift level circuit 16 of Figure 9 which includes transistor 27 having its gate connected to power supply V1. However, this argument is not persuasive because circuit 16 in Figure 9 is already refers to a level shift circuit of the input circuit recited independent claim 1, so it cannot also be refers as a second circuit of

the input circuit. Further, circuit 16 cannot charges/discharges voltage of an output terminal of the first amplifier 15 when switching to standby state. In fact, Figure 14 clearly shows the second circuit (transistors 62a-62b) is control by current control signal S1, so the second circuit is turned on/off depending the control signal S1 which is switched between the standby state and the activated state and transistors 62a-62b discharges the voltage of the output terminal of the first differential amplifier 61.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Long Nguyen whose telephone number is (571) 272-1753. The Examiner can normally be reached on Monday to Thursday from 8:00am to 6:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached at (571) 272-1740. The fax number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 25, 2005

  
LONG NGUYEN  
PRIMARY EXAMINER